



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/517,606      | 12/21/2004  | Bernhard Brinkhaus   | 04236               | 8529             |

23338 7590 06/13/2007  
DENNISON, SCHULTZ & MACDONALD  
1727 KING STREET  
SUITE 105  
ALEXANDRIA, VA 22314

|          |
|----------|
| EXAMINER |
|----------|

WOODALL, NICHOLAS W

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3733

|           |               |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

06/13/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

ED

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/517,606 | <b>Applicant(s)</b><br>BRINKHAUS, BERNHARD |  |
|                              | <b>Examiner</b><br>Nicholas Woodall  | <b>Art Unit</b><br>3733                    |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-11 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This action is in response to applicant's amendment received on 03/15/2007.

#### ***Allowable Subject Matter***

2. The indicated allowability of claim 6 is withdrawn in view of the newly discovered reference(s) to Guenther. Rejections based on the newly cited reference(s) follow.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

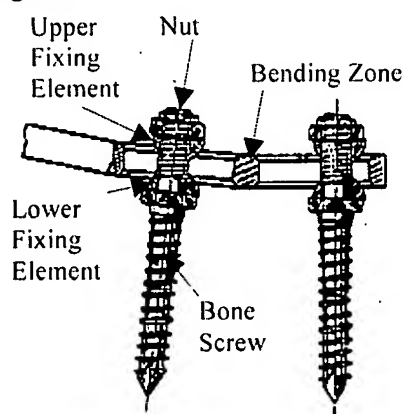
4. Claims 1-3 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Alby (WO 95 27444 A).

Regarding claim 1, Alby shows a device, see Figure 1 below, comprising a bone screw, a plate arrangement, and upper and lower fixation elements. The plate includes at least one opening in which the bone screw is displaceable. The fixation elements comprise an eccentric bore through which the bone screw can pass through. The bone screw is capable of being movable around its longitudinal axis at a point above the shaft. The upper and lower fixing element disks are capable of being longitudinally disposed and rotatable within the plate or rod. Regarding claim 2, Alby shows a device wherein the plate has a ring along the inner wall of the opening. Regarding claim 3, Alby shows a device in which the upper and lower fixation elements are circular in shape. Regarding claim 9, Alby shows a device where the bone screw is an adjusting screw,

Art Unit: 3733

and that the upper portion of the screw has a thread that can be attached to the device with a nut. Regarding claims 10 and 11, Alby shows a system of devices comprising plate arrangements, bone screws, and fixation elements as shown in Figure 1 (claim 10). The multiple devices are connected together by bending zones as shown in Figure 1 below (claim 11).

Figure 1



### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alby (WO 95 27444 A).

Alby discloses the claimed invention except for the lower fixation element is thicker than the upper fixation element. It would have been an obvious matter of design

Art Unit: 3733

choice to make the lower fixation element thicker than the upper fixation member, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alby (WO 95 27444 A).

Alby discloses the claimed invention except for the hole in the lower fixation element has a conical shape. It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the hole in the lower fixation element of Alby with a conical shape, since applicant has not disclosed that such solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing a forming edge in the heating portion or clamp. In re Dailey and Eilers, 149 USPQ 47 (1966).

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alby (WO 95 27444 A) in view of Guenther (German Patent DE19512709).

Regarding claim 6, Alby discloses the invention as claimed except for the bone screw comprising an upper part capable of being screwed into the plate or rod and lower bone screw shaft part comprising an upper end. Guenther teaches a device wherein the bone screw comprises an upper part capable of being screwed into the plate or rod and lower bone screw shaft part comprising an upper end in order to allow the bone screw to be adjustable. It would have been obvious to one having ordinary skill

in the art at the time the invention was made to manufacture the device of Alby wherein the bone screw comprises an upper part capable of being screwed into the plate or rod and lower bone screw shaft part comprising an upper end in view of Guenther in order to allow the bone screw to be adjustable.

Further regarding claim 6, the combination of Alby and Guenther disclose the invention as claimed except for the upper part of the bone screw comprising a spherical receptacle on the lower end and the lower bone screw shaft part including a spherical head on the upper end capable of being received in the spherical receptacle of the upper part. It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the device of Alby modified by Guenther wherein the upper part of the bone screw comprising a spherical receptacle on the lower end and the lower bone screw shaft part including a spherical head on the upper end capable of being received in the spherical receptacle of the upper part, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In re Einstein, 8 USPQ 167.

#### ***Allowable Subject Matter***

9. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments filed 03/15/2007 have been fully considered but they are not persuasive. In response to applicant's argument that Alby does not include certain

Art Unit: 3733

features of applicant's invention, the limitations on which the applicant relies (i.e., rotation of the hemispherical nuts does not result in a change of the position of the bone screw) are not stated in the claims. Therefore, it is irrelevant whether the reference includes those features or not. The applicant's argument that the Alby reference is not capable of performing certain functions, i.e. rotation of the hemispherical nuts does not result in a change of the position of the bone screw, having a fine positioning adjustment, or having a rough positioning adjustment, is irrelevant since the claims do not contain limitations towards those functions. Claim 1 requires that the disks be capable of longitudinal displacement and rotation within the plate and the bone screw being capable of axial movement above the bone screw shaft. The disks of Alby are capable of longitudinal displacement and rotation within the plate and the bone screw can be axially moved above the bone screw shaft relative to the plate by loosening or tightening the nut threadingly engaged to the threads on the upper end of the bone screw. The applicant has amended independent claim 1, the amendment changed the limitations of the claim from the disks being accommodated in the plate in a displaceable manner to the disks being longitudinally displaceable within the plate. The amendment necessitated the reexamination of the prior art and the new grounds of rejection presented above regarding claims 1-6 and 9-11, since the amendment necessitated the new grounds of rejection this office action is **FINAL**.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 3733

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas Woodall whose telephone number is 571-272-5204. The examiner can normally be reached on Monday to Friday 8:00 to 5:30 EST..

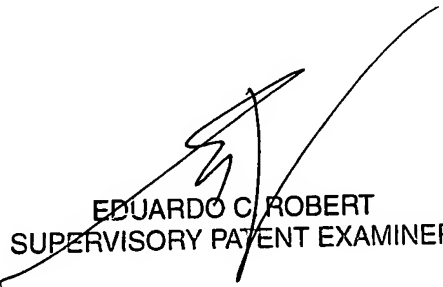
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 3733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NWWW



EDUARDO C. ROBERT  
SUPERVISORY PATENT EXAMINER